

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>MBJ - 0525/PCT</b>	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/EP2004/002254</b>	International filing date (day/month/year) <b>05/03/2004</b>	(Earliest) Priority Date (day/month/year) <b>03/04/2003</b>
Applicant  <b>CONSTRUCTION RESEARCH &amp; TECHNOLOGY GMBH</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☒ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/002254

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
  
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-13

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: [1-13]

1.0) A cement additive containing copolymers comprising a unit of formula A, an acid unit of formula B and an acrylate unit of formula C.

---

2. claims: [1-13]

1.1) A cement additive containing copolymers comprising a unit of formula A, a maleic anhydride unit of formula B and an acrylate unit of formula C.

---

3. claims: [1-13]

1.2) A cement additive containing copolymers comprising a unit of formula A, a maleic imide unit of formula B and an acrylate unit of formula C.

---

4. claims: [1-13]

1.3) A cement additive containing copolymers comprising a unit of formula A, an acid unit or a maleic anhydride or imide unit of formula B and an acrylamide unit of formula C.

---

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/002254

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C04B24/26 C04B24/32

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C04B C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/096823 A (NIPPON CATALYTIC CHEM IND ;YAMASHITA AKIHIKO (JP); HIRATA TSUYOSHI) 5 December 2002 (2002-12-05) abstract; claim 2; examples 4-6; table 1 -----	1,8
X	EP 1 052 232 A (TAIHEIYO CEMENT CORP) 15 November 2000 (2000-11-15) examples 3,6 -----	1,2
X	WO 01/58579 A (TSUZUKI TOSHITAKA ;MIYATA AKITAKA (JP); NARUSE SHIHO (JP); NAT STA) 16 August 2001 (2001-08-16) abstract; table 1 -----	1
X	DE 199 26 611 A (SUEDDEUTSCHE KALKSTICKSTOFF) 14 December 2000 (2000-12-14) claim 1 -----	1

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

27 May 2004

Date of mailing of the international search report

27. 07. 04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Pollio, M

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/002254

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02096823	A	05-12-2002	CN 1463259 T	24-12-2003
			EP 1390317 A1	25-02-2004
			WO 02096823 A1	05-12-2002
			US 2003199616 A1	23-10-2003
-----				
EP 1052232	A	15-11-2000	JP 2000169206 A	20-06-2000
			JP 2001002788 A	09-01-2001
			JP 2001064070 A	13-03-2001
			JP 2001064072 A	13-03-2001
			CA 2318090 A1	08-06-2000
			EP 1052232 A1	15-11-2000
			US 6437027 B1	20-08-2002
			WO 0032534 A1	08-06-2000
			JP 2001097759 A	10-04-2001
			JP 2001097758 A	10-04-2001
			JP 2001130943 A	15-05-2001
-----				
WO 0158579	A	16-08-2001	JP 2001220196 A	14-08-2001
			AU 3314501 A	20-08-2001
			EP 1409121 A1	21-04-2004
			WO 0158579 A1	16-08-2001
			US 2003209695 A1	13-11-2003
-----				
DE 19926611	A	14-12-2000	DE 19926611 A1	14-12-2000
			AT 245173 T	15-08-2003
			AU 762434 B2	26-06-2003
			AU 4394900 A	02-01-2001
			CA 2375597 A1	21-12-2000
			DE 50002923 D1	21-08-2003
			DK 1189955 T3	10-11-2003
			WO 0077058 A1	21-12-2000
			EP 1189955 A1	27-03-2002
			ES 2203457 T3	16-04-2004
			HK 1044785 A1	07-11-2003
			JP 3411538 B2	03-06-2003
			JP 2000351820 A	19-12-2000
			PT 1189955 T	31-12-2003
-----				